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Addressing serious harm to the marine environment in the regulations for the exploitation of mineral resources in the Area

Submitted by the delegation of the Netherlands

I. Introduction

1. At its seventeenth session in July 2011, the Council of the International Seabed Authority requested the Secretariat to prepare a strategic workplan for the formulation of regulations for the exploitation of deep-sea minerals in the Area. The decision of the Council was in response to the statement submitted by the delegation of Fiji (ISBA/17/C/22).

2. Following the decision of the Council, the Secretariat prepared a strategic workplan for the formulation of regulations for the exploitation of polymetallic nodules in the Area (see ISBA/18/C/4) and submitted it at the eighteenth session, held in 2012.

3. Since consideration of the plan by the Council and its endorsement by a number of delegations, work on the development of regulations for the exploitation of mineral resources in the Area (exploitation regulations) has been ongoing in the Secretariat, the Legal and Technical Commission and in the Council.

II. Reason for submitting

4. The issues involved in the development of the exploitation regulations have proved to be highly complex. The technical study prepared for the Secretariat by a consultant contains a good overview of those issues.[1] The executive summary of the study states that, in complying with the request mentioned in paragraph 1, the

[1] Clark, A. et al., *Towards the Development of a Regulatory Framework for Polymetallic Nodule Exploitation in the Area* (International Seabed Authority Technical Study No. 11, Kingston, February 2013).

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Authority faces the challenge of developing an exploitation framework that ensures that the exploitation of polymetallic nodules will: (a) benefit mankind as a whole, including future generations; and (b) foster commercially viable and sustainable exploitation, of the Area's mineral resources, including reasonable economic returns.

5. The study does not deal with the specifics of an environmental regime for the exploitation of polymetallic nodules. It does, however, specify key environmental components that will have to be developed and included in an overall exploitation framework. Furthermore, it is noted in the study that, if remediation is not practical or technologically possible, the logical alternative would be financial compensation for the environmental damage and the loss of ecosystem services from the seabed.

6. In the report of the Secretary-General containing the proposed workplan (ISBA/18/C/4), it is stated that, owing to the complexity of the issues involved in the development of the exploitation regulations:

> ... it will be necessary to provide the Legal and Technical Commission with relevant technical advice and information prior to its consideration of detailed draft regulations. Such advice and information would include information on fiscal regimes for comparable land-based mining; economic assessments of mineral production, including capitalization, operating costs, depreciation and amortization of mines; anticipated tonnages, grades and recovery efficiencies; and other financial and technical issues. Further work will also need to be carried out on the assessment of the potential environmental impacts of future mining.

7. In its report to the members of the Authority and all stakeholders entitled "Developing a Regulatory Framework for Mineral Exploitation in the Area", published in March 2015, the Legal and Technical Commission identified the restoration and rehabilitation of the marine environment as an issue to be addressed in the draft regulations on: (a) an environmental management plan; (b) environmental bonds and performance guarantees; and (c) the restoration and rehabilitation of the marine environment.

8. In view of the mandate of the Authority under section 1, paragraph 5 (k), of the annex to the 1994 Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982, which refers to "the timely elaboration of rules, regulations and procedures for exploitation, including those relating to the protection and preservation of the marine environment", and the role of the Council in adopting guidelines and directives for the exercise of functions by its organs, in this case the Legal and Technical Commission (see art. 163, para. 9, of the Convention), the delegation of the Netherlands submits the attached document on addressing serious harm to the marine environment in the regulations for the exploitation of mineral resources of the Area.

III. Objective

9. The objective of the annexed document is to further the incorporation of provisions into the exploitation regulations that address the serious harm to the marine environment and threats of such harm following an incident resulting from or caused by a contractor's activities in the Area.

10. In this regard, the delegation would like to note its objective to build upon the legal framework of Convention and the achievements of the Authority to date, including the three sets of regulations for the exploration of mineral resources of the Area (exploration regulations).

IV. Recommendations

11. The Council is invited to take into account the considerations above when considering the annexed document.

12. The Council is also invited to request the Legal and Technical Commission to consider recommending that:

(a) The exploitation regulations be based on the provisions on emergency orders in the exploration regulations in order to address threats of serious harm to the marine environment following an incident resulting from or caused by a contractor's activities in the Area;

(b) The exploitation regulations include an obligation requiring contractors to address serious harm to the marine environment by:

(i) Assessing the technical and economic feasibility of implementing restoration measures and;

(ii) Providing for restoration by equivalent, compensatory measures and/or the payment of monetary compensation if no adequate restoration measures have been or can be implemented;

(c) Private sector initiatives to address harm to the marine environment be supported and encouraged.

Annex

Addressing serious harm to the marine environment in the regulations for the exploitation of mineral resources in the Area

I. Introduction

1. Activities in the Area may cause injury to the interests of others, including those of private persons (legal and natural persons), States, international organizations and the international community as a whole. The damage may result from personal injury, property damage, economic loss or environmental loss, including damage to biological diversity. The present paper will focus on environmental loss.

2. Activities in the Area will have an impact on the marine environment. The impacts will have to be identified and described in an environmental impact assessment. Activities in the Area may also create a risk of such impacts. Pursuant to the United Nations Convention on the Law of the Sea of 10 December 1982, the Council of the International Seabed Authority shall disapprove areas for exploitation in cases where substantial evidence indicates the risk of serious harm to the marine environment (art. 162.2 (x)). Risks should be identified and quantified in an environmental impact assessment. It will be for the Council to decide whether the identified impacts and risks are acceptable when approving a plan of work for a particular activity and to prescribe measures to manage such risks.

3. The quality of an environmental impact assessment depends on available science and, hence, such an assessment may not identify all impacts and risks, or not quantify risks with full accuracy.

4. The generally accepted rule in domestic jurisdictions is that damage lies where it falls, unless it originates with the wrongful conduct of a person, such as a contractor (fault-based civil liability). A framework is necessary to determine whether and to what extent damage resulting from activities in the Area should lie where it falls and not be redressed, or be incurred by an entity involved in activities in the Area.

5. Special rules have been developed for a number of activities that are considered to create a significant risk of damage, including rules at the international level for oil pollution damage and nuclear damage. Pursuant to such rules, the standard of civil liability is strict (i.e. not based on fault), no or few exoneration or mitigation defences may be invoked and liability is limited with regard to amount and time. In addition, such special rules may provide for additional mechanisms to provide redress, e.g. a fund financed by industry, residual State liability and/or a fund financed by States.

6. The traditional civil liability approach is not suitable for addressing environmental loss because it presumes the existence of a natural or legal person (victim) that can present a claim for the damage suffered. With respect to environmental loss, civil law remedies can address such loss if a person is permitted: (a) to recover the costs of measures taken by the person to respond to the loss or a threat of such loss; or (b) to claim compensation or injunctive relief in

connection with the loss. However, civil liability does not impose an obligation on the polluter to take response measures. Furthermore, civil liability is a core element of domestic law, rules and procedures diverge between States and attempts to harmonize civil liability laws have not been very successful. With respect to areas beyond the limits of national jurisdiction, civil law remedies can only address environmental loss if an international normative framework is established that permits a person: (a) to take response measures and recover the costs; or (b) to claim compensation or injunctive relief on behalf of the international community.

II. Addressing environmental loss

7. In the event of environmental loss or a threat of such loss, the primary objective should be prevention and restoration rather than monetary compensation. To address the threat of environmental loss following an incident, the focus should be on the prevention of loss. To redress environmental loss, the focus should be on the restoration of loss. This could be achieved by requiring the implementation of response measures. Such response measures should aim:

(a) To prevent, minimize and contain environmental loss in the event of an imminent threat of environmental loss;

(b) To restore the environment to the condition that existed before the loss occurred in the event of environmental loss.

8. There are several internationally agreed precedents for this alternative approach to addressing environmental loss, including:

(a) The Mining Code, specifically regulation 33 of the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area (ISBA/6/A/18, annex), regulation 35 of the Regulations on Prospecting and Exploration for Polymetallic Sulphides in the Area (ISBA/16/A/12/Rev.1, annex) and regulation 35 of the Regulations on Prospecting and Exploration for Cobalt-rich Ferromanganese Crusts in the Area (ISBA/18/A/11, annex), requires the implementation of response measures to prevent serious harm to the marine environment in the event of an emergency;

(b) With regard to environmental emergencies in the Antarctic Treaty area, annex VI to the Protocol on Environmental Protection to the Antarctic Treaty on liability arising from environmental emergencies (Measure 1 (2005)) requires the implementation of response measures to prevent environmental loss in the event of an environmental emergency; and

(c) With regard to damage caused by living modified organisms, the 2010 Nagoya — Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety requires the implementation of response measures to avoid damage to biological diversity or to restore such damage.

9. Pursuant to the instruments referred to in paragraph 8, the obligation to implement response measures does not apply to all environmental loss. The loss must result in an adverse effect on the environment that is measurable or otherwise observable and surpasses a certain threshold. The threshold is usually defined using qualitative terms such as "significant" or "serious". With respect to activities in the Area, the threshold for the issuance of emergency orders to prevent environmental

loss is contingent on "serious harm to the marine environment" (see art. 162.2 (w) of the Convention and the regulations of the Mining Code referred to in para. 8). In addition, it will have to be established whether the loss can be restored through natural remediation within a reasonable time (passive rehabilitation).

10. The implementation of response measures may not always be technically feasible or economically reasonable. In the event of environmental loss in the Area, this is the more likely scenario for the implementation of restoration measures. The question arises whether the damage should lie where it falls or whether an obligation should be introduced to address the environmental loss by alternative measures. Such alternative measures could be in the form of restoration by equivalent, compensatory measures or monetary compensation, as described below.

(a) Restoration by equivalent could be achieved by the replacement of the damaged environmental components with equivalent components for the same or another type of use, either at the same or an alternative location. If restoration by equivalent in the Area is not technically feasible or economically reasonable, restoration measures could be implemented outside the Area, e.g. in coastal zones with a non-favourable conservation status. Such measures could, for example, aim at the restoration of damaged coral reefs or mangrove forests. The Nagoya — Kuala Lumpur Supplementary Protocol provides a precedent for restoration by equivalent (see art. 2.2 (d) (ii) b);

(b) The implementation of compensatory measures could consist of the designation of a zone in the Area in which activities would be prohibited. A damaged area would thus be offset by a preserved area that otherwise would have been mined. Such measures would result in a quantifiable loss of income for the International Seabed Authority, for which the Authority should be compensated;

(c) The payment of monetary compensation could be required to indicate that the causation of environmental loss would not be without consequences. The level of payment could be based on the costs of equivalent restoration measures. Annex VI to the Protocol on Environmental Protection to the Antarctic Treaty provides a precedent for monetary compensation as an alternative for the implementation of response measures (see art. 6.2 (b)).

11. In addition to an intergovernmental regulatory framework, environmental loss may be addressed through private sector instruments (self-regulation). Examples include the Compact: A Contractual Mechanism for Response in the Event of Damage to Biological Diversity Caused by the Release of a Living Modified Organism and the Offshore Pollution Liability Agreement in connection with offshore exploration for or production of oil and gas. In the context of deep seabed mining, the International Marine Minerals Society provides a platform for additional work and the voluntary Code for Environmental Management of Marine Mining, which contains provisions on rehabilitation and compensation, could be the basis for such additional work.

III. Current legal framework

12. The current legal framework, including the Convention, the 1994 Agreement relating to the Implementation of Part XI of the Convention and the Mining Code, contains rules on liability for damage. The International Tribunal for the Law of the

Sea has clarified the current legal framework in its advisory opinion of 1 February 2011 on responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area.

(a) Liability of States and international organizations

(i) Pursuant to article 139 of the Convention, a State or an international organization may be liable for damage caused by its failure to carry out its responsibilities under Part XI. In its advisory opinion, the Tribunal clarified that the obligation to carry out responsibilities under Part XI was an obligation of conduct and a due diligence obligation (para. 111). Hence, if a State or an international organization has exercised the required degree of due diligence (with respect to the contractors it sponsors), it would not be liable for any damage caused.

(ii) Pursuant to article 235 of the Convention, States are responsible for the fulfilment of their international obligations concerning the protection and preservation of the marine environment and shall be liable in accordance with international law. Under international law, an internationally wrongful act entails a State's liability. The customary international obligation of a State to prevent those activities within its jurisdiction or control that cause transboundary harm is generally considered to be an obligation of conduct and of due diligence. To exercise the required degree of diligence, States must ensure that recourse is available for prompt and adequate compensation or other relief with respect to damage caused by pollution of the marine environment by natural or juridical persons under their jurisdiction (art. 235.2).

(b) Liability of contractors

Pursuant to article 22 of annex III of the Convention, the contractor is liable for any damage arising out of wrongful acts in the conduct of its operations. This provision is reaffirmed in the regulations on nodules (regulation 30 and section 16 of annex IV), sulphides (regulation 32 and section 16 of annex 4) and crusts (regulation 32 and section 16 of annex IV).

(c) Liability of the Authority

Pursuant to article 22 of Annex III of the Convention, the Authority is liable for any damage arising out of wrongful acts in the exercise of its powers and functions. This provision is reaffirmed in the regulations on nodules (regulation 30 and section 16 of annex IV), sulphides (regulation 32 and section 16 of annex 4) and crusts (regulation 32 and Section 16 of annex IV).

IV. Gap analysis

13. In its advisory opinion of February 2011, the Tribunal observed that a gap in liability might occur if, notwithstanding the fact that the sponsoring State had taken all necessary and appropriate measures, the sponsored contractor had caused damage and was unable to meet its liability in full (para. 203). It was also pointed out that a gap in liability might occur if the sponsoring State failed to meet its obligations, but that failure was not causally linked to the damage (para. 203). The

Tribunal suggested that the Authority consider the establishment of a trust fund to compensate for the damage not covered (para. 205).

14. It therefore merits consideration whether and how damage in such situations should be redressed, in particular in the event of environmental loss. With regard to traditional damage (personal injury, property damage or economic loss), the current legal framework may be considered satisfactory. If activities in the Area are considered to create a risk of serious harm to the marine environment, consideration should be given to the introduction of special civil liability rules (see para. 5). With regard to environmental loss, the current legal framework may not be considered satisfactory. In particular, serious harm to the marine environment may not be addressed if the contractor is not liable or cannot meet its liability in full. Accordingly, there would be merit in addressing this issue in the exploitation regulations.

V. Options to address serious harm or a threat of serious harm to the marine environment

15. To address a threat of serious harm to the marine environment following an incident resulting from or caused by a contractor's activities in the Area, it is recommended to base the exploitation regulations on the provisions on emergency orders in the exploration regulations (see para. 8).

16. To address serious harm to the marine environment, it is recommended to consider the introduction of an obligation in the exploitation regulations requiring contractors:

(a) To assess the technical and economic feasibility of implementing restoration measures;

(b) To provide for restoration by equivalent, compensatory measures and/or the payment of monetary compensation if no adequate restoration measures have been or can be implemented (see para. 10).

17. It is also recommended to support and encourage private sector initiatives to address harm to the marine environment (see para. 11).